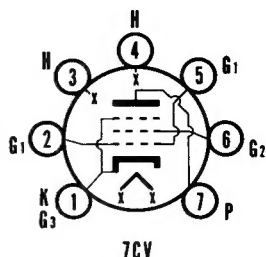




SYLVANIA TYPE 32ET5A BEAM POWER AMPLIFIER



MECHANICAL DATA

| | |
|------------------------|------------------------------|
| Bulb..... | T-5 1/2 |
| Base..... | E7-1, Miniature Button 7-Pin |
| Outline..... | 5-3 |
| Basing..... | 7CV |
| Cathode..... | Coated Unipotential |
| Mounting Position..... | Any |

ELECTRICAL DATA

HEATER CHARACTERISTICS AND RATINGS

Average Characteristics

| | |
|--|------------|
| Heater Voltage..... | 32 Volts |
| Heater Current ¹ | 100 Ma |
| Heater Warm-up Time ² | 20 Seconds |

Series Operation

Ratings (Design Maximum Values)

| | |
|---|----------------------|
| Heater Current ³ | Min-Max 94-106 Ma |
| Maximum Heater-Cathode Voltage | |
| Heater Negative with Respect to Cathode | |
| Total D C and Peak..... | 200 Volts |
| Heater Positive with Respect to Cathode | |
| D C..... | 100 Volts |
| Total D C and Peak..... | 200 Volts |

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

| | |
|-------------------------------|-------------|
| Grid No. 1 to Plate..... | 0.6 μ f |
| Input: g to (h+k+g2+g3)..... | 12 μ f |
| Output: p to (h+k+g2+g3)..... | 6.0 μ f |

RATINGS (Design Maximum System)

| | |
|-------------------------------|-----------------|
| Plate Voltage..... | 150 Volts Max. |
| Grid No. 2 Voltage..... | 130 Volts Max. |
| Plate Dissipation..... | 5.4 Watts Max. |
| Grid No. 2 Dissipation..... | 1.2 Watts Max. |
| Grid No. 1 Circuit Resistance | |
| Fixed Bias..... | 0.1 Megohm Max. |
| Cathode Bias..... | 0.5 Megohm Max. |

CHARACTERISTICS AND TYPICAL OPERATION

Class A1 Amplifier

| | |
|--|-----------------|
| Plate Voltage..... | 110 Volts |
| Grid No. 2 Voltage..... | 110 Volts |
| Grid No. 1 Voltage..... | -7.5 Volts |
| Peak AF Grid No. 1 Voltage..... | 7.5 Volts |
| Zero-Signal Plate Current..... | 30 Ma |
| Zero-Signal Grid No. 2 Current..... | 2.8 Ma |
| Transconductance..... | 5500 μ mhos |
| Plate Resistance (approx.)..... | 21,500 Ohms |
| Load Resistance..... | 2800 Ohms |
| Maximum-Signal Power Output..... | 1.2 Watts |
| Total Harmonic Distortion (approx.)..... | 10 Percent |

NOTES:

- For series operation of heaters, equipment should be designed that at normal supply voltage bogey tubes will operate at this value of heater current.
- Heater warm-up time is defined as the time required for the voltage across the heater to reach 80% of the rated heater voltage after applying four (4) times rated heater voltage to a circuit consisting of the tube heater in series with a resistance equal to three (3) times the rated heater voltage divided by the rated heater current.
- Heater voltage supply variations shall be restricted to maintain heater current within the specified values.

APPLICATION

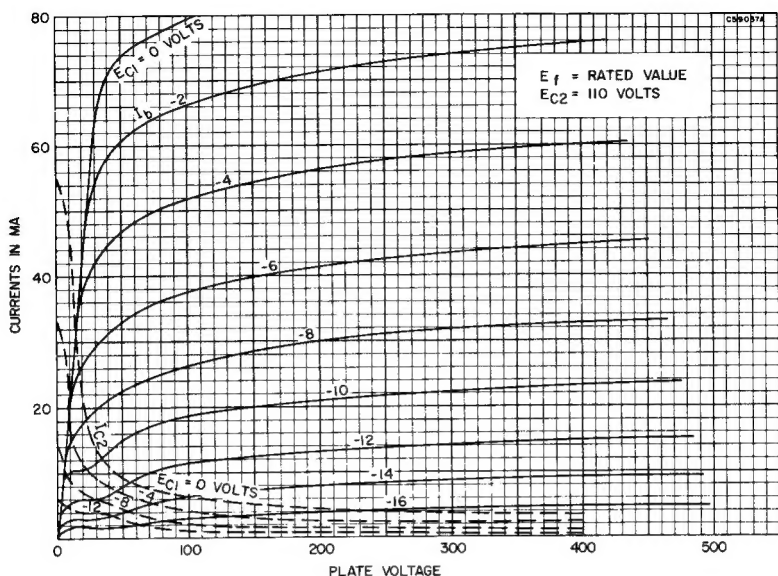
The Sylvania Type 32ET5A is a miniature beam power pentode designed for service as an audio output amplifier. It features high efficiency at relatively low plate and Grid No. 2 voltage.

Type 32ET5A designed for use in AC-DC radio receivers incorporates a 100 Ma heater controlled for heater warm-up time.

Type 32ET5A replaces obsolete Type 32ET5.

SYLVANIA TYPE 32ET5A (Cont'd)

AVERAGE PLATE CHARACTERISTICS



OPERATIONAL CHARACTERISTICS

